

ABSTRACT OF THE DISCLOSURE

Radio equipment including a characteristic compensator for compensating for an orthogonality error of a mixer with low consumption power is disclosed. In radio equipment, an orthogonal detector converts a received real signal into a complex
5 reception signal of an intermediate frequency. Further, when a complex reception signal converted into a digital signal by A/D converters includes a desired signal (quasi-desired signal), which includes an image signal of a non-desired signal, and a non-desired signal (preparatory desired signal), which includes an image signal of a desired signal, a frequency of the quasi-desired signal is frequency-converted to a signal closer to a direct
10 current component by a frequency converter and a frequency of the preparatory desired signal is frequency-converted to a signal closer to a direct current component by a frequency converter. A decimator respectively performs a filtering and a down-sampling on the frequency-converted quasi-desired signal and preparatory desired signal. A characteristic compensator 7 suppresses the image signal of the non-desired signal
15 included in an inputted quasi-desired signal by means of a complex codomain signal of an inputted preparatory desired signal.